We Claim:

1. An antibody or fragment thereof that binds to an epitope of PSGL-1, wherein the antibody or fragment thereof has the binding capabilities of an scFv of SEQ ID NO:1.

2. The antibody or fragment thereof of claim 1, wherein the antibody or fragment thereof comprises one heavy chain complementarity determining region (CDR) selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4.

3. The antibody or fragment thereof of claim 2, wherein two heavy chain CDRs are selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4.

4. The antibody or fragment thereof of claim 3, wherein three heavy chain CDRs are selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4.

5. The antibody or fragment thereof of claim 4, wherein the antibody or fragment thereof comprises SEQ ID NO:1.

6. An antibody or fragment thereof that binds to an epitope of PSGL-1 comprising one heavy chain complementarity determining region (CDR) selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4.

7. The antibody or fragment thereof of claim 6, wherein two heavy chain CDRs are selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4.

8. The antibody or fragment thereof of claim 7, wherein three heavy chain CDRs are selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4.

9. An antibody or fragment thereof that binds to an epitope of PSGL-1 comprising SEQ ID NO:1.

10. The antibody or fragment thereof of claim 1, wherein the antibody or fragment thereof comprises at least one framework variable region from germline DP32.

11. The antibody or fragment thereof of claim 1, wherein the antibody or fragment thereof is a substantially circular or looped peptide or polypeptide.

12. The antibody or fragment thereof of claim 1, wherein the epitope comprises at least one sulfated moiety.

13. The antibody or fragment thereof of claim 1, wherein the antibody or fragment thereof binds two or more epitopes, each epitope comprising one or more sulfated tyrosine residues

14. The antibody or fragment thereof of claim 13, wherein each epitope comprises at least one cluster of two or more acidic amino acids.

15. The antibody or fragment thereof of claim 1, wherein the antibody or fragment thereof cross-reacts with two or more epitopes, each epitope having one or more sulfated tyrosine residues.

16. The antibody or fragment thereof of claim 15, wherein each epitope comprises at least one cluster of two or more acidic amino acids.

17. The antibody or fragment thereof of claim 1, wherein the antibody or fragment thereof binds to an epitope on at least one cell type selected from the group consisting of T-ALL cells, AML cells, B-leukemia cells, B-CLL, and multiple myeloma cells.

18. The antibody or fragment thereof of claim 1, wherein the antibody or fragment thereof binds to an epitope on a lipid, carbohydrate, peptide, glycolipid, glycoprotein, lipoprotein, and/or lipopolysaccharide molecule.

19. The antibody or fragment thereof of claim 1, wherein the antibody or fragment thereof is coupled to or complexed with an agent selected from the group consisting of anti-cancer, anti-leukemic, anti-metastasis, anti-neoplastic, anti-disease, anti-adhesion, anti-thrombosis, anti-restenosis, anti-autoimmune, anti-aggregation, anti-bacterial, anti-viral, and anti-inflammatory agents.

20. The antibody or fragment thereof of claim 19, wherein the agent is an anti-viral agent selected from the group consisting of acyclovir, ganciclovir and zidovudine.

21. The antibody or fragment thereof of claim 19, wherein the agent is an anti-thrombosis/anti- restenosis agent selected from the group consisting of cilostazol, dalteparin sodium, reviparin sodium, and aspirin.

22. The antibody or fragment thereof of claim 19, wherein the agent is an anti-inflammatory agent selected from the group consisting of zaltoprofen, pranoprofen, droxicam, acetyl salicylic 17, diclofenac, ibuprofen, dexibuprofen, sulindac, naproxen, amtolmetin, celecoxib, indomethacin, rofecoxib, and nimesulid.

23. The antibody or fragment thereof of claim 19, wherein the agent is an anti-autoimmune agent selected from the group consisting of leflunomide, denileukin diftitox, subreum, WinRho SDF, defibrotide, and cyclophosphamide.

24. The antibody or fragment thereof of claim 19, wherein the agent is an anti-adhesion/anti-aggregation agent selected from the group consisiting of limaprost, clorcromene, and hyaluronic acid.

25. The antibody or fragment thereof of claim 19, wherein the agent is selected from the group consisting of toxins, radioisotopes, imaging agents, and pharmaceutical agents.

26. The antibody or fragment thereof of claim 25, wherein the toxin is selected from the group consisting of gelonin, *Pseudomonas* exotoxin (PE), PE40, PE38, ricin, and modifications and derivatives thereof.

27. The antibody or fragment thereof of claim 25, wherein the radioisotope is selected from the group consisting of gamma-emitters, positron-emitters, x-ray emitters, beta-emitters, and alpha-emitters.

28. The antibody or fragment thereof of claim 25, wherein the radioisotope is selected from the group consisting of ^{111}indium, ^{113}indium, ^{99m}rhenium, ^{105}rhenium, ^{101}rhenium, ^{99m}technetium, ^{121m}tellurium, ^{122m}tellurium, ^{125m}telluriunm ^{165}thulium, ^{167}thulium ^{168}thulium ^{123}iodine, ^{126}iodine, ^{131}iodine, ^{133}iodine, ^{81m}krypton, ^{33}xenon,

^{90}yttrium, ^{213}bismuth, ^{77}bromine, ^{18}fluorine, ^{95}ruthenium, ^{97}ruthenium, ^{103}ruthenium, ^{105}ruthenium, ^{107}mercury, ^{203}mercury, ^{67}gallium and ^{68}gallium.

29. The antibody or fragment thereof of claim 25, wherein the pharmaceutical agent is an anthracyline.

30. The antibody or fragment thereof of claim 29, wherein the anthracyline is selected from the group consisting of doxorubicin, daunorubicin, idarubicin, detorubicin, carminomycin, epirubicin, esorubicin, morpholinodoxorubicin, morpholinodaunorubicin, and methoxymorpholinyldoxorubicin.

31. The antibody or fragment thereof of claim 25, wherein the pharmaceutical agent is selected from the group consisting of cis-platinum, taxol, calicheamicin, vincristine, cytarabine (Ara-C), cyclophosphamide, prednisone, fludarabine, chlorambucil, interferon alpha, hydroxyurea, temozolomide, thalidomide and bleomycin, and derivatives and combinations thereof.

32. The antibody or fragment thereof of claim 19, wherein the antibody or fragment thereof is coupled to or complexed with a vehicle or carrier that can be coupled or complexed to more than one agent.

33. The antibody or fragment thereof of claim 32, wherein the vehicle or carrier is selected from the group consisting of dextran, lipophilic polymers, HPMA, and liposomes, and derivatives and modifications thereof.

34. An isolated epitope comprising an amino acid sequence that binds to the antibody or fragment thereof of claim 1.

35. The isolated epitope of claim 34, wherein the isolated epitope comprises at least one sulfated moiety.

36. The isolated epitope of claim 35, wherein the sulfated moiety is a sulfated tyrosine.

37. The isolated epitope of claim 34, wherein the isolated epitope comprises a cluster of negatively charged amino acids.

38. The isolated epitope of claim 37, wherein the cluster comprises amino acids 1 and 17 of mature PSGL-1.

39. An isolated or purified polynucleotide encoding the antibody or fragment thereof of claim 1.

40. An expression vector comprising the polynucleotide sequences of claim 39.

41. A recombinant host cell comprising the expression vector of claim 40.

42. The recombinant host cell of claim 41, or a progeny thereof wherein the cell expresses the antibody or fragment thereof.

43. A method of producing a recombinant cell comprising transfecting a cell with the expression vector of claim 40.

44. A method of producing an antibody or fragment thereof comprising culturing the cell of claim 41 under conditions permitting expression of the antibody or fragment thereof.

45. The method of claim 44, wherein the method further comprises isolating or purifying the antibody or fragment thereof from the cell or medium of the cell.

46. A pharmaceutical composition comprising an antibody or fragment thereof of claim 1 and a pharmaceutically acceptable carrier.

47. A diagnostic, prognostic, or staging kit comprising an antibody or fragment thereof of claim 1 and an imaging agent.

48. The diagnostic, prognostic, or staging kit of claim 47, wherein the imaging agent is a radioactive isotope.

49. A method of treating a disease comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

50. A method of treating cell rolling comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

51. A method of ameliorating the effects of inflammation, preventing inflammation, treating inflammation, or inhibiting the progress of inflammation comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

52. A method of treating an infection comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

53. The method of claim 52, wherein the infection is caused by HIV.

54. The method of claim 52, wherein the administration prevents cell entry of HIV.

55. A method of treating an auto-immune disease comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

56. A method of treating metastasis comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

57. A method of treating growth and/or replication of tumor cells comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

58. A method of increasing the mortality rate of tumor cells comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

59. A method of treating growth and/or replication of leukemia cells comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

60. A method of increasing the mortality rate of leukemia cells comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

61. A method of altering the susceptibility of diseased cells to damage by anti-disease agents comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

62. A method of increasing the susceptibility of tumor cells to damage by anti-cancer agents comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

63. A method of increasing the susceptibility of leukemia cells to damage by anti-cancer agents comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

64. A method of inhibiting increase in number of tumor cells in a patient having a tumor comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

65. A method of decreasing number of tumor cells in a patient having tumor comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

66. A method of inhibiting increase in number of leukemia cells in a patient having leukemia comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

67. A method of decreasing number of leukemia cells in a patient having leukemia comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

68. A method of eliciting antibody dependent cell-mediated cytotoxicity (ADCC) comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

69. A method of stimulating a natural killer (NK) cell or a T cell comprising administering to a patient in need thereof a pharmaceutical composition of claim 46.

70. A method of diagnosing or prognosing a disease in a patient comprising

providing a sample containing a cell from the patient and

determining whether the antibody or fragment thereof of claim 1 binds to the cell of the patient,

thereby indicating that the patient is at risk for or has the disease.

71. A method of diagnosing or prognosing inflammation in a patient comprising

providing a sample containing a cell from the patient and

determining whether the antibody or fragment thereof of claim 1 binds to the cell of the patient,

thereby indicating that the patient is at risk for or has inflammation.

72. A method of diagnosing or prognosing an infection in a patient comprising

providing a sample containing a cell from the patient and

determining whether the antibody or fragment thereof of claim 1 binds to the cell of the patient,

thereby indicating that the patient is at risk for or has an infection.

73. The method of claim 72, wherein the infection is caused by HIV.

74. A method of diagnosing or prognosing an auto-immune disease in a patient comprising

providing a sample containing a cell from the patient and

determining whether the antibody or fragment thereof of claim 1 binds to the cell of the patient,

thereby indicating that the patient is at risk for or has an auto-immune disease.

75. A method of diagnosing, prognosing, or staging metastasis in a patient comprising

providing a sample containing a cell from the patient and

determining whether the antibody or fragment thereof of claim 1 binds to the cell of the patient,

thereby indicating that the patient is at risk for or has metastasis.

76. A method of diagnosing, prognosing, or staging a tumor cell in a patient comprising

providing a sample containing a cell from the patient and

determining whether the antibody or fragment thereof of claim 1 binds to the cell of the patient,

thereby indicating that the patient is at risk for or has a tumor cell.

77. A method of diagnosing, prognosing, or staging leukemia in a patient comprising

providing a sample containing a cell from the patient and

determining whether the antibody or fragment thereof of claim 1 binds to the cell of the patient,

thereby indicating that the patient is at risk for or has leukemia.

78. A method of purging tumor cells from a patient comprising

providing a sample containing cells from the patient and

incubating the cells from the patient with an antibody or fragment thereof of claim 1.

79. The method of claim 78, wherein the purging occurs *ex vivo*.

80. Use of a pharmaceutical composition of claim 46 in the manufacture of a medicament for treating a disease.

81. The use of claim 80, wherein the disease is selected from the group consisting of cell rolling, inflammation, an auto-immune disease, an infection, metastasis, growth and/or replication of tumor cells, and growth and/or replication of leukemia cells.

82. A pharmaceutical composition of claim 46 for use in the manufacture of a medicament for treating a disease.

83. The pharmaceutical composition of claim 82, wherein the disease is selected from the group consisting of cell rolling, inflammation, an auto-immune disease, an infection, metastasis, growth and/or replication of tumor cells, and growth and/or replication of leukemia cells.

84. A process for producing an antibody or fragment thereof comprising the steps of:

providing a phage display library;

providing at least two molecules or cells that binds to an antibody or fragment thereof having the binding capabilities of an scFv antibody or fragment thereof fragment of SEQ ID NO:1;

panning the phage display library for a phage particle displaying an oligopeptide or polypeptide that binds to at least two of the molecules or cells; and

producing an antibody or fragment thereof comprising an antibody or fragment thereof or binding fragment thereof comprising the peptide or polypeptide that binds to at least two of the molecules or cells.

85. An antibody or fragment thereof produced according to the process of claim 84.